HiMod® FlatSeal™ 15

IDEAL FOR STEAM, OILS, FUELS AND HYDROCARBONS

A range of gaskets to meet market needs

The HiMod® flat gasket range consists of products that will satisfy the requirements of the majority of gasket applications within aerospace, chemical and processing industries. It offers compliance with virtually all relevant standards including FDA and those for blowout and fugitive emissions.

HiMod® FlatSeal™ 15

This gasket shows exceptionally good resistance to steam and fluids such as oils, fuels and hydrocarbons.

Applications

- Aircraft gear boxes, pumps, hydraulic systems and actuators
- Instrumentation
- Pumps, valves, compressors, drives and engines
- Gas and water supply including heating (sanitary engineering)
- Pipeline construction
- Plant construction and maintenance
- Machine manufacturing

Features and benefits

- Ideal for use in medium to high temperatures and pressures
- Outstanding mechanical strength
- Leakage less than limits specified in DIN 3535-6
- Exceptionally good resistance to steam and fluids such as oils, fuels and hydrocarbons
- WRAS approved for use in hot and cold potable water
- Anti-stick coating on one side
- Approvals: BS7531, DVGW, KTW*, BAM*, TA Luft, WRAS*, EC 1935/2004

Good for people and the environment

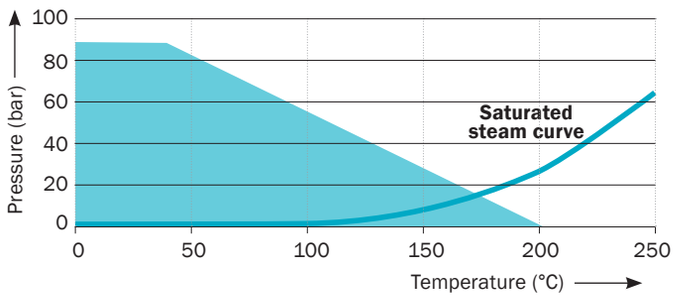
HiMod® FlatSeal™ 15 is manufactured in facilities that comply with ISO/TS 16949 and ISO 14001. This means complete transparency in all areas of production and a high degree of security for our customers.

TECHNICAL INFORMATION ABOUT HIMOD® FLATSEAL™ 15

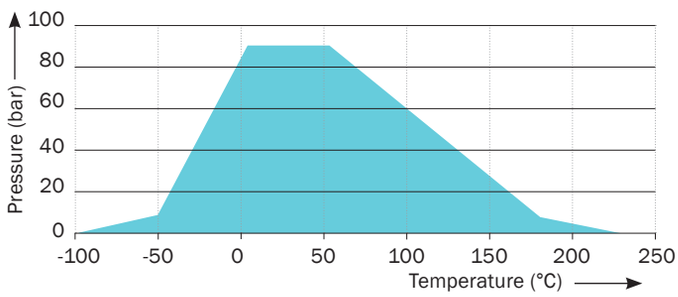
Recommendations for use

according to pressure and temperature

Water/steam



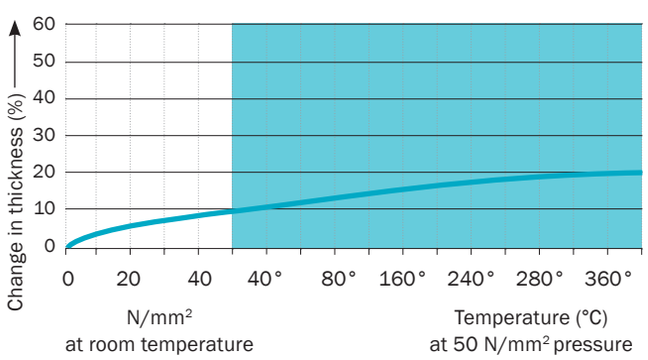
Other Media



The temperature and pressure recommendations in the graphs apply to gaskets with a thickness of 2.0 mm and smooth flanges.
Higher stresses are possible when thinner gaskets are used.

Example for the most commonly used other media. Exact data for specific, individual cases are available on demand.

Deformation under temperature 2.0 mm



Material data

General data	
Elements	Glass fibers, functional fillers and NBR (Nitrile Butadiene Rubber)
Approvals	BS7531, DVGW, KTW*, BAM*, TA Luft, WRAS*, EC 1935/2004
Color	Silver grey
Anti-stick coating	On one side
Thickness in mm	0.5/ 1.0/ 1.5/ 3.0 Further thicknesses are available on request
Thickness tolerance	According to DIN 28 091-1

Physical properties Gasket thickness 2.0 mm	**Standard**	**Unity**	**Value****
Density	DIN 28 090-2	[g/cm³]	1.80
Tensile strength longitudinal transverse	DIN 52 910	 [N/mm²] [N/mm²]	 21 9
Residual stress $\sigma_{dE/16}$ 175 °C 300 °C	DIN 52 913	 [N/mm²] [N/mm²]	 38 28
Compressibility	ASTM F 36 J	[%]	7
Recovery	ASTM F 36 J	[%]	62
Cold compressibility ε_{KSW}	DIN 28 090-2	[%]	5.5
Cold recovery ε_{KRW}	DIN 28 090-2	[%]	3
Hot creep $\varepsilon_{WSW/200}$	DIN 28 090-2	[%]	12
Hot recovery $\varepsilon_{WRW/200}$	DIN 28 090-2	[%]	1.5
Specific leakage rate	DIN 3535-6	[mg/(s·m)]	≤ 0.100
Fluid resistance	ASTM F146		
ASTM IRM 903 Weight change Thickness increase	5h/150 °C	 [%] [%]	 7 2
ASTM Fuel B Weight change Thickness increase	5h/23 °C	 [%] [%]	 9 4
Leachable Chloride content	FZT PV-001-1330	[ppm]	≤ 150

* Approvals applied for. ** Mode (typical value).

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